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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/810,943   | 03/16/2001  | Ralf Oestreicher     | 60,426-268          | 7794             |
| 24500  | 7590        | 12/02/2003           | EXAMINER            |                  |
| SIEMENS CORPORATION<br>INTELLECTUAL PROPERTY LAW DEPARTMENT<br>170 WOOD AVENUE SOUTH<br>ISELIN, NJ 08830 |             |                      | NGUYEN, TAN QUANG   |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3661                |                  |

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/810,943

Applicant(s)

OESTREICHER ET AL.

Examiner

TAN Q NGUYEN

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 36-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 56 and 57 is/are allowed.
- 6) ☒ Claim(s) 36-55, 61-65 and 69-73 is/are rejected.
- 7) ☒ Claim(s) 58-60 and 66-68 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.



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| APPLICATION NO./<br>CONTROL NO. | FILING DATE | FIRST NAMED INVENTOR /<br>PATENT IN REEXAMINATION | ATTORNEY DOCKET NO. |
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| EXAMINER |
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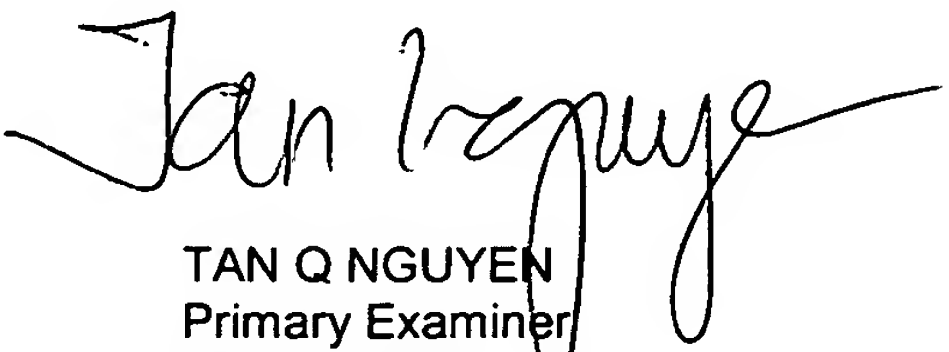
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DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

  
TAN Q NGUYEN  
Primary Examiner  
Art Unit: 3661

## DETAIL ACTION

### ***Notice to Applicant(s)***

1. This Office Action is in response to the Applicant's amendment filed on October 14, 2003. Claims 36-73 are still pending.

### ***Interference***

2. Claims 36-40 of this application has been copied by the applicant from U.S. Patent No. 6,039,344. These claims are not patentable to the applicant because of the following rejections.
3. An interference cannot be initiated since a prerequisite for interference under 37 CFR 1.606 is that the claims be patentable to the application subject to a judgment in the interference.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 36-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over the published Research Disclosure 39916 in view of Gognon (5,810,392) and Harris (3,661,220).

7. With respect to claim 36, the Research disclose teaches a seat frame, four load cells are attached between the seat frame and the seat track at the mounting points (see figure 1), and a vehicle occupant protection device responsive to the output of the load cells (see figure 2).

8. The Research disclosure does not explicitly disclose the use of weight sensor assemblies in the form of a strain gauge and a plurality of deflectable mounting structures which together bear the entire weight of the frame. However, Gagnon similarly discloses a seat occupant weight sensing system in which load cells can be mounted between a rigid member and a seat pan at four corners as shown in figure 3. Gagnon further suggests that each sensor may be for example a strain gauge, a load cell or a variable resistance pressure sensor (see at least column 5, lines 44-67). In addition, Harris suggests a weighting device for used in vehicle which includes 4 load cells, each including a strain gauge mounting assembly as shown in at least figures 2 and 3. Harris further suggests that the resilient mounting structure 40 allows it to flex freely so that the beam always bend in the same way when applied forces, thereby improving system accuracy (see column 2, lines 23-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have implemented

the use of strain gauges mounted on a deflectable mounting structure as taught in Gagnon and Harris as the load cells for sensing more accurately occupant weight.

9. With respect to claim 37, the Research disclosure does disclose that the load cell is mounted on the track structure (see figure 2).

10. With respect to claim 38, The Research disclosure does disclose a deflectable seat cushion on the frame (see figure 1).

11. With respect to claim 39, the Research disclosure does disclose the vehicle seat frame having a bottom portion and a back portion which together bear a vehicle occupant weight load (figure 1, forces A and B).

12. With respect to claims 40-47 and 49-55, the limitations of this claim has been noted in the rejections above and figure 3 and the related text of the Harris reference. It is therefore considered rejected as set forth above.

13. With respect to claim 48, Gognon does disclose the restraint device is not deployed if the seat occupant weight is below a predetermined weight (see at least column 7, lines 1-9).

14. Claims 61-63 and 69-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over the published Research Disclosure, Gognon and Harris as applied to the claims above, and further in view of Mazur et al. (5,906,393).

15. The Research disclosure, Gognon and Harris disclose the claimed invention as discussed above except that the controller calculates weight of an occupant by sampling the response of the load sensor. However, such feature is shown in at least figure 2 of the Mazur et al. reference. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such teaching of Mazur into the combination system of the research, Gognon and Harris in order to provide more accuracy of the occupant weight.

16. The amended claims 56 and its dependent 57 are allowable.
17. Claims 58-60 and 66-68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Conclusion**

18. Claims 36-55 and ~~58-73~~<sup>61-65, 69-73</sup> are rejected. Claims 56 and 57 are allowable.
19. Applicant's arguments filed on October 14, 2003 have been fully considered and they are partially deemed to be persuasive.
20. In response to Applicant's argument that the rejection improperly relies upon nonanalogous art Harris reference, it has held that the determination that a reference is from a nonanalogous art is twofold. First we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the invention was involved. In re Wood, 202 USPQ 171, 174 (CCPA 1979). In the demonstrate that the Wood test supports a conclusion that the art is nonanalogous. Obviously, Harris does refer to the weighting device relating to the vehicle and does suggest the load cell system having a strain gauge mounting assembly (see at least the abstract). Therefore, Harris reference is not a nonanalogous art.
21. Applicant also argued that there is no suggest or motivation in any of the applied references that would led one of ordinary skill in the art to modify the seat structure in the Research Disclosure in the manner proposed by the examiner. It is not necessary that the references actually suggest, expressly or in so many words, the changes or improvements that applicant has made. The test for combining references is what the



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references as a whole would have suggested to one of ordinary skill in the art. In re Shecler, 168 USPQ 716 (CCPA 1971); In re McLaughlin, 170 USPQ 209 (CCPA 1971); In re Young, 159 USPQ 725 (CCPA 1986). Since Gargon suggests a seat occupant weight sensing system including load cells and Harris suggests a weighting device which includes 4 load cells and the resilient mounting structure 40 that allows it to flex freely so that the beam always bend in the same way when the forces is applied, it would have been motivated one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Gargon and Harris into the system of Research Disclosure to improve the accuracy of the system.

22. Applicant also argued that the Hus reference does not teach the use of pulse width modulation circuit and a two-stage signal amplifier for amplifying the pulse width modulation signal to a readable level. It is persuasive, thus the rejection applied to these claims have been withdrawn.

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.



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24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tan Nguyen, whose telephone number is (703) 305-9755. The examiner can normally be reached on Monday-Thursday from 5:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski, can be reached on (703) 308-3873.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

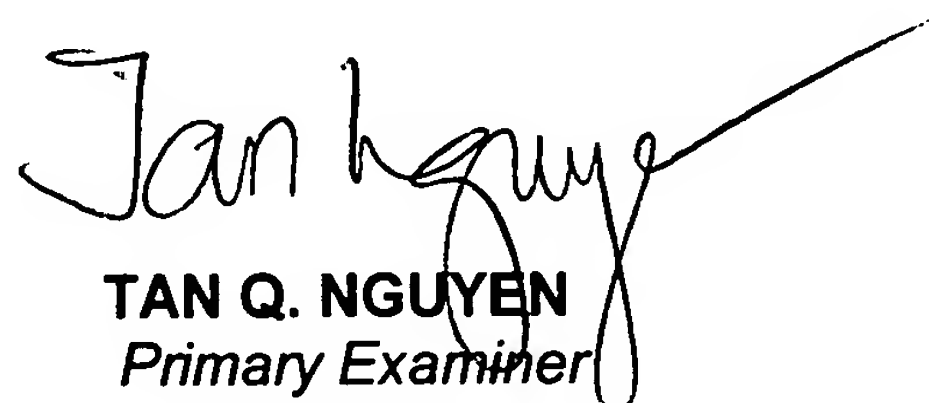
or faxed to:

(703) 305-7687, (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park V, 2451  
Crystal Drive, Arlington, VA., Seventh Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

/tqn  
November 30, 2003

  
**TAN Q. NGUYEN**  
*Primary Examiner*  
Art Unit 3661